

West Virginia

Forest Health Highlights



April 1998

The Resource

The West Virginia landscape is dominated by more than 11.8 million acres of forest. Due in large part to its varied topography, the forests are a rich diversity of oaks, hickories, spruce, pines, and the state tree — sugar maple.

Ninety percent of all forests in the state are privately owned; but there are 9 state forests, 36 state parks, and 56 wildlife management areas that provide for public enjoyment.

Forest Stewardship

The philosophy of the Forest Stewardship Program is to insure that private landowners apply environmental and economic resource management principles to benefit themselves, future landowners, and the public.

The focal point of the Forest Stewardship Program is the development of a long-term management plan for each woodland owner who is willing to participate.

In West Virginia, the Forest Stewardship Program includes having a forest management plan written by a professional forester, as well as financial assistance for reforestation, forest improvement, soil and water protection, wetlands protection, fisheries habitat enhancement, wildlife habitat enhancement, and forest recreation enhancement.

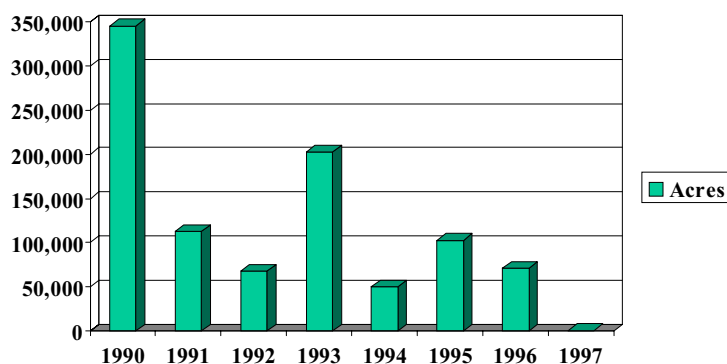
As of September 1996, 290 stewardship plans covering 65,414 acres have been developed for landowners in West Virginia.

Special Issues

Gypsy Moth — The gypsy moth fungus, *Entomophaga maimaiga*, was first found in West Virginia in 1992. This fungus has spread throughout the generally infested areas and can now be found in 23 counties. Since 1995, it has dramatically reduced the gypsy moth population in these areas.

In 1997, only 473 acres of gypsy moth-caused defoliation occurred in two counties, mostly in the northwest part of the state. Efforts by the West Virginia Department of Agriculture to continue to reduce the infestation resulted in the spraying of 17,511 acres. The state is also involved in a joint state-federal effort to attempt to slow the spread (STS) of gypsy moth throughout the remaining counties. The STS Program treated 3,055 acres with B.t.k. and 3,255 acres with mating disruption.

Gypsy Moth Defoliation for WV
Total Acres (952,669) Includes all Ownerships



Beech Bark Disease — American beech in the state is threatened by the introduction of beech bark disease. In 1981, beech scale, the insect component of the beech bark disease complex, was found infesting beech timber in more than 70,000 acres of forestland. By 1997, the scale insect infested beech trees over an area encompassing 1,286,576 acres in Grant, Barbour, Randolph, Tucker, Pocahontas, Upshur, and Pendleton Counties. The disease-killing front encompasses 868,276 acres of forestland in all but Barbour and Grant Counties. Currently, there are no efforts underway to attempt to control beech bark disease.

Ash Yellows Disease — This insect-vectored disease of ash trees is caused by an organism known as a *phytoplasma*. First detected in West Virginia in 1992, it has now been confirmed at multiple sites in 19 counties using fluorescence microscopy or witches' brooms as the diagnostic characteristic. Most of the counties with infection centers are adjacent to or near the Ohio River and in the Eastern Panhandle.

Oak Slug Sawfly — Defoliation from an outbreak of oak slug sawfly occurred in 1997 over an area of 115,657 acres in northern Wayne County and western Cabell County. Early season defoliation was limited to the upper 1/3 to 1/2 of the crown, but by late season, defoliation was observed over the entire crown. Sawfly damage also extended into Kentucky and Ohio. Hosts included red, scarlet, black, pin, and a limited number of white oaks.

White Pine Dieback and Mortality — Investigations in Pocahontas County revealed that turpentine beetles and pine sawyer beetles had infested many large, old trees. Turpentine beetles are thought to be responsible for the observed mortality. Additionally, seedlings and saplings in the area were also dying. The branch, seedling, and sapling mortality were thought to be caused at least in part by the pine pruning fungus *Cenangium* sp. However, *Cenangium* fruiting was not found on the sections, but *Diplodia pinea* and an unidentified ascomycete fungus that produces apothecia were found.

Mile-A-Minute Weed — This exotic weed is considered a serious threat to reforestation efforts, Christmas tree plantations, nurseries, and other agricultural endeavors. A rapidly growing annual vine, mile-a-minute weed forms dense

mats in open, sunny areas that can suppress tree seedlings and saplings as well as nursery and agricultural crops.

Surveys have been conducted for mile-a-minute weed, *Polygonum perfoliatum*, on the islands and the shoreline in the Ohio River, Belleville Lock and Dam Pool, Wood County. Since it was first detected in 1980, the range of mile-a-minute weed continues to expand.

Fire

The 1997 spring fire season reported 648 fires burned over 7,388 acres. This caused an estimated damage of \$2,132,099. Cost of suppression was estimated at \$46,791. The number one cause of forest fires in West Virginia is arson. Debris burning is a distant second.

Regional Surveys

West Virginia participated in the National Forest Health Monitoring Program in 1996 by visiting permanent sites to monitor crown conditions, tree damage, lichen populations, ozone damage, and vegetation diversity. One unique aspect of West Virginia's program is that state service foresters were trained and certified to collect crown and damage data.

A large outbreak of elm yellows disease was observed in Berkeley and Jefferson Counties east of I-81 in late summer of 1995. Surveys conducted in 1996 and 1997 detected tens of thousands of diseased elms in the outbreak area that extends into Maryland, Virginia, and Pennsylvania. The distribution of the outbreak is currently being mapped through a cooperative project with Virginia, Maryland, Pennsylvania, and West Virginia.

For More Information



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